



EPA'S STORMWATER RULE

MAYORS INNOVATION PROJECT



1.16.13

Stormwater is a leading cause of water quality impairment and growing

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- Urban stormwater is a leading source of impairment and is a growing water quality concern
 - Approximately 800,000 acres being developed every year, growing to over 1.0 million acres per year by 2039
- Development increases the amount of impervious cover in the landscape
- Small increases in impervious cover leads to big impacts in receiving waters
- Development upstream can cause downstream impacts in communities



Stormwater Impacts: Pollutant Loading and Hydrology

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Pollutant Impacts



Bacteria: Cause beach closures and swimming illnesses



Sediments, nutrients, metals, and temperature: Impact fisheries and shellfish harvesting

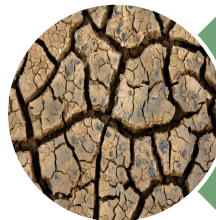


Increase the costs of treating drinking water supplies to the public

Hydrologic Impacts



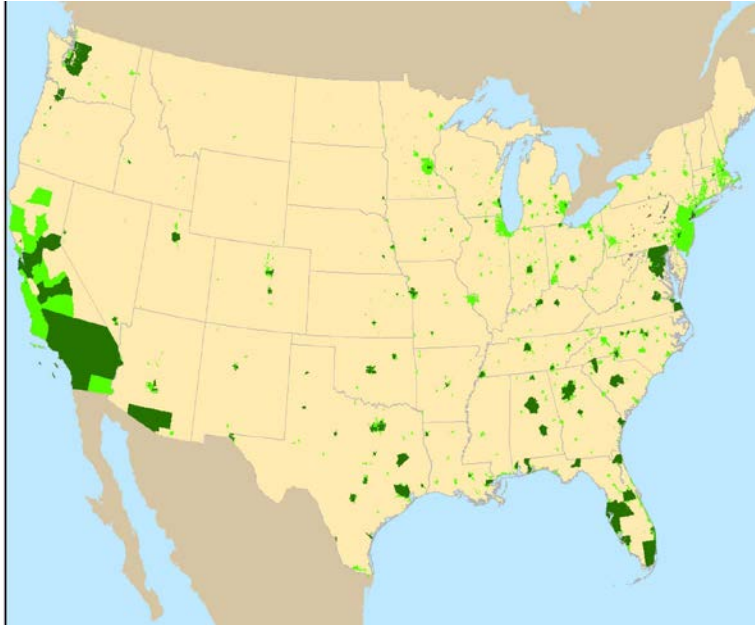
Increased stormwater volume: Causes flooding, scouring and sewer overflows



Reduced groundwater recharge: Causes stream baseflows to become extremely low

Existing Program

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Current Coverage

- Primarily in urbanized area
- Accounts for much of the population
- Only about 2% of the land area

Regulated MS4s

- Medium and Large MS4s > 100,000 population
- Small MS4s in urbanized areas

MS4 Permit Requirements

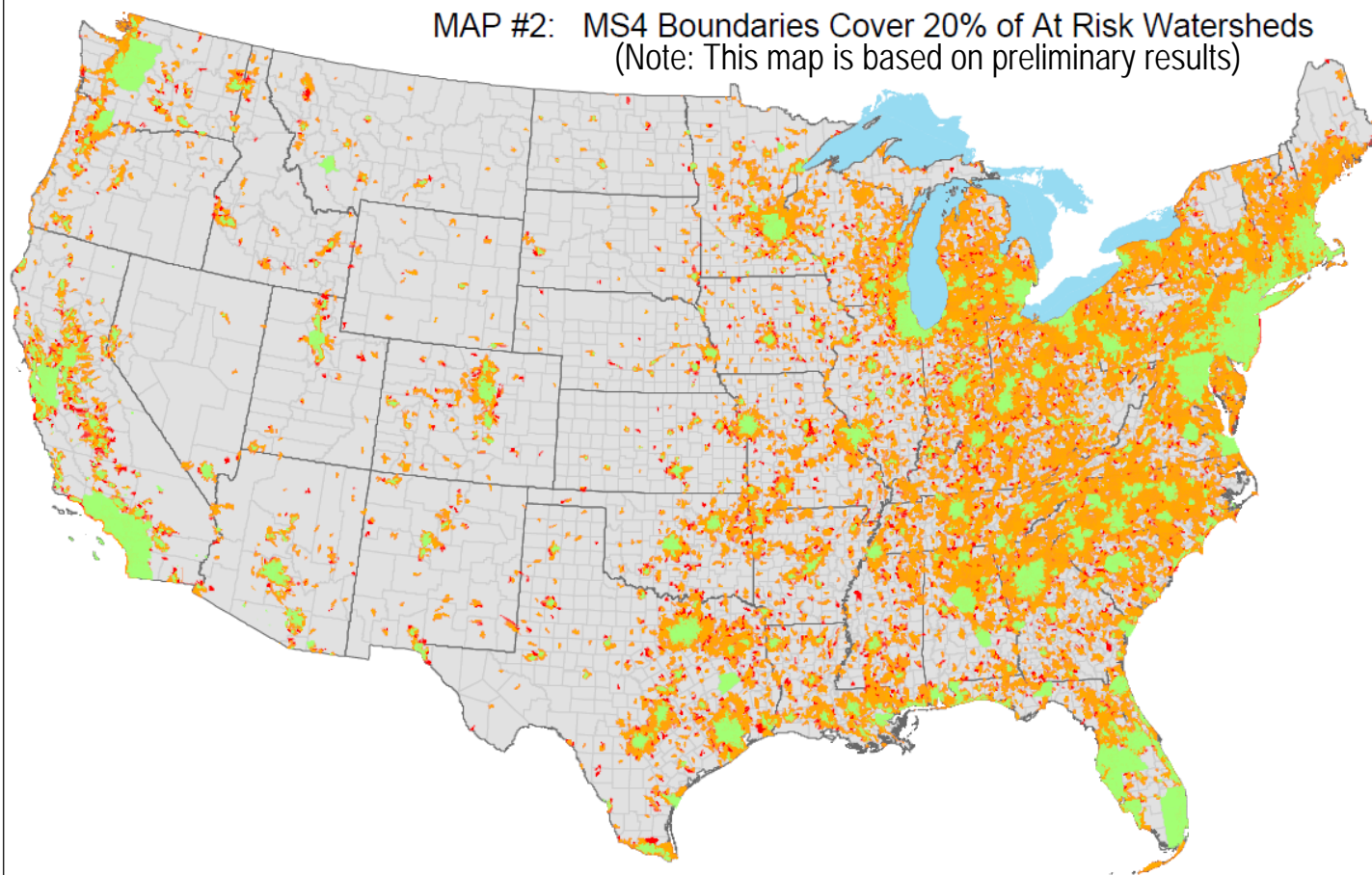
- Public Education & Outreach
- Public Participation
- Illicit Discharge Detection and Elimination
- Pollution Prevention/Good Housekeeping
- Active Construction Program
- Post-construction Program for New Development and Redevelopment Sites ≥ 1 acre
 - General requirement
 - No performance standards required

Regulatory Coverage vs. Watershed Imperviousness

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Regulated MS4 Boundaries & At Risk HUC 12 Watersheds

MAP #2: MS4 Boundaries Cover 20% of At Risk Watersheds
(Note: This map is based on preliminary results)



2010 MS4 Boundaries At Risk Watersheds (>5% Impervious) 2010 At Risk Watersheds (>5% Impervious) 2040



New Direction

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- Incorporate sustainable stormwater controls into sites as they are being developed and redeveloped
 - ▣ Provides most cost-effective opportunity
 - ▣ Prevents water quality degradation in healthy waters
 - ▣ Helps restore impaired waters
- Sustainable practices (i.e., green infrastructure) provide numerous other benefits to communities



ASLA Honor Award Recipient, NE Siskiyou Green Street by Kevin Robert Perry, ASLA (Photo: Kevin Robert Perry)



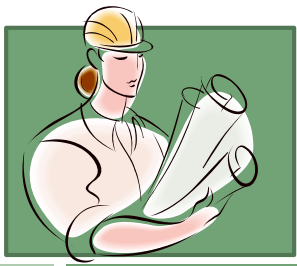
Key Focus of the Proposed Stormwater Rule

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Establish performance standards for discharges from newly developed and redeveloped sites

- Places requirement on developer of the site
- Could apply to sites within and outside of MS4
- Protects communities from upstream development
- Creates level playing field

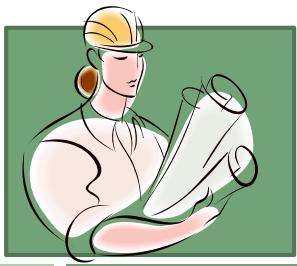




Performance Standards

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- Considering a retention-based performance standard to reduce pollutants resulting from the increased volume and velocity of stormwater discharges at newly developed and redeveloped sites
- Considering standard that varies according to an area's climate, soil, and other location-specific characteristics
- Flexibilities
 - Could accommodate site constraints (including water rights laws)
 - managed through treatment
 - off-site mitigation in the same subwatershed
 - payment in lieu.
 - States could also develop alternative programs that are better suited to their needs, but that are as protective as the national standard
 - Allow phased implementation



Performance Standards

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Discharges from Redeveloped Sites

Recommend lower standard for redevelopment

- Recognize site constraints
- To encourage redevelopment to revitalize urban communities
- Considering additional incentives for smart growth and brownfields development



LA Infiltration Planters. *Photo courtesy of Bill DePoto.*

Rulemaking Schedule

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Proposal: June 2013

Final Action: December 2014



www.epa.gov/npdes/stormwater/rulemaking